Meeting Notes

Evaluation of the MUN beneficial use in Agriculturally Dominated Water Bodies

March 26, 2013

9:00 AM -3:00 PM

Location: Central Valley Regional Water Quality Control Board Office, 11020 Sun Center Drive, Suite 200 Rancho Cordova, CA 95670: Training Room

Attendees:

American River Conservancy – Catherine Ciofalo

California Department of Fish and Game (Fresno) – Rachel McNeal *(by phone)*

California Rice Commission - Roberta Firoved, Tim Johnson

California Urban Water Agencies – Elaine Archibald

Central Valley Water Board - Anne Littlejohn, Betty Yee, Calvin Yang, Gene Davis, Greg Cash *(by phone)*, Jeanne Chilcott

City of Colusa – Jesse Cain

City of Willows – Skyler Lipski *(by phone)*

Colusa Glenn Subwatershed Program – Lester Messina

Delta Stewardship Council – Mark Bradley *(by phone)*

J.G. Boswell Company – Dennis Tristao

Nexgenum– Dan Rich

Northern California Water Association – Bruce Houdesheldt *(by phone)*

McKenna, Long and Aldridge – Jacob Lubarsky

Sacramento River Joint Source Water Protection Program – Elissa Callman

San Joaquin Valley Drainage Authority – David Cory *(by phone)*

Santa Clara Water District – Laura Young *(by phone)*

South San Joaquin Irrigation District – Jim Atherstone

State Water Resources Control Board – Diane Barclay

Sterling Caviar – Tom Henderson

Stoel Rives – Loren Harlow

Tulare Lake Drainage District – Mike Nordstrom

Meeting Summary

Review of the Sacramento Archetype Monitoring Program (PPT presentation available)

- Central Valley Water Board staff provided a review of monitoring results from the past three quarters of monitoring (April 2012 – January 2013) in the areas of Biggs, Colusa, Live Oak and Willows.
    - Key Observations
        - Nitrate exceedances were seen in Colusa, Live Oak, and Willows' effluent but did not continue downstream
        - Ammonia exceedances were measured in Biggs' effluent but did not continue downstream
        - Sodium levels in almost all samples exceeded the 20 mg/L US EPA Drinking Water Advisory for persons on restricted sodium diet
        - Total Aluminum, Manganese and Iron were exceeded only upstream and downstream of POTW effluent.
        - Dissolved Manganese and Iron exceedances were seen sporadically in the receiving waters of Biggs, Colusa and Willows, but not in the effluent.
        - Majority of Arsenic (total and dissolved) exceedances were measured in the Live Oak receiving waters and in their effluent
        - Trihalomethanes were only measured the Willows effluent, but there were no exceedances downstream.
        - Boron exceedances were measured upstream of Colusa's effluent discharge
        - Central Valley Water Board staff is still reviewing E. coli results
    - Storm Season Observations (October 2012 – January 2013)
        - Water levels generally increased during December 2012 sampling event
        - Most exceedances were consistent with previous results except as follows:
            - No Total Arsenic or Nitrate exceedances were measured in Live Oak's Lateral #2 during Dec 2012
            - No Nitrate exceedances were measured in Colusa's Unnamed Tributary during Nov – Dec 2012
            - New Total Fluoride and Sulfate exceedances were measured in Colusa's sample sites except Colusa's effluent. Suggestion was made to recheck the fluoride sample if possible to make sure it wasn't an inaccurate result.

- Proposed Monitoring for April 2013 – September 2013
    - Continue field sampling twice per month (to confirm variability in conductivity)

- Continue existing constituents with following adjustments:
  - Stop sampling Nitrate at Biggs sample sites.
  - Stop sampling Boron at Biggs, Live Oak, Willows sample sites.
  - Change Total Fluoride sampling to monthly for Colusa sample sites only.
  - Resume Total and Dissolved Arsenic sampling for all sites.

There was general consensus among stakeholders at the meeting with the proposed changes to the Monitoring Plan.

- Review of Lab Budget – Total Funds spent thus far from the BSK Laboratories Contract is $18,880. Remaining Funds in the contract stand at $26,220 with a projected remaining cost for sampling at $25,096 with proposed changes.

Action Items:

- *Central Valley Water Board staff will provide recommended monitoring changes to the CV-SALTS Technical Advisory Committee and with TAC concurrence, will continue to monitor the Sacramento Archetype areas with proposed changes.*
- *Central Valley Water Board will request re-testing of the Colusa sample that had a fluoride exceedance.*

Review Updated Draft Work Plan

- Central Valley Water Board staff gave a brief overview of the updated draft project Work Plan that will be reviewed by CV-SALTS Technical Committee. The project is currently on schedule, however, comments during the CEQA scoping sessions identified concerns with utilizing work conducted in the Sacramento River Basin to categorize and potentially revise beneficial uses on water bodies in the San Joaquin and Tulare Basins. The revised work plan proposes two possibilities for continuing the project:
  - Continue with original work plan: Contract for CEQA analysis and Economic review in the Sacramento region only ($200,000 estimate)
  - Test the preferred alternative in three additional case study areas (East San Joaquin Valley, West San Joaquin Valley, Tulare Lake Basin) to serve as "checks" for applying the Sacramento case study template to the entire Central Valley Region and expand CEQA and Economic review contract to cover those areas. ($50,000 addition per study area)
- Central Valley Water Board staff asked stakeholders to think about the proposed options and be prepared to discuss them later in the meeting (see page 8)

Review of the updated water body categorization flow chart

- Central Valley Water Board staff gave an overview of the updated Flow Chart 1, a slightly modified version of the water body categorization approach approved by the Central Valley Water Board in 1992.

- Key Changes:
  - Addition of the M1 and M2 categories to distinguish the previously categorized C3 category water bodies into those receiving agricultural supply water or drainage water.
  - Addition of a Unclassified water body to provide a spot for water bodies lacking the appropriate identification information.
  - Process change to ensure that Ag Dominated modified natural streams are evaluated correctly.
- Suggestion was made to streamline the label "water body" and not use other descriptors like "facility" or "waterway".

Action Items:

- *Central Valley Water Board will make minor changes to Flow Chart 1 to clarify and streamline terminology*

Discussion of Categorical MUN Beneficial Use Designation

- Central Valley Water Board staff presented a proposed MUN beneficial use designation process to stakeholders using the water body categorization presented in Flow Chart 1. Key concepts, based on previous stakeholder feedback, included:
  - De-designation for water bodies meeting the exceptions in the Sources of Drinking Water Policy Resolution 88-63 (such as the constructed Ag drains and Closed Ag Recirculating Systems)
  - Refined MUN Beneficial Use designations including categories such as "Potential" and/or "Limited" or "Treatable" MUN for supply channels or natural Ag Dominated water bodies.
    - Potential MUN may be characterized as water bodies:
      - Not currently utilized for MUN
      - Containing or able to be managed to provide "adequate" or "sustainable" flow for municipal/domestic supply
      - With no Water Quality data indicating contamination or with similar characteristics with other sites that don't demonstrate contamination
    - Limited (Treatable) MUN may be characterized as water bodies:
      - Not currently utilized for MUN
      - Containing intermittent flow

            - With Water Quality Data or best professional judgment based on similar water bodies indicating natural or anthropogenic contamination that must be treated prior to MUN

    - Special considerations like Management/Operation Plans for de-designated water bodies to ensure downstream water bodies are protected.

    - Recognition that the appropriate Water Quality Objectives would need to be attached to the different MUN beneficial use categories. For example, how would primary and secondary MCLs or other guidelines be used to determine "contamination"?

- Central Valley Water Board staff provided an example of a narrative drinking water quality objective used by the state of Colorado for stakeholders to consider:
    - "These surface waters are suitable or intended to become suitable for potable water supplies after receiving standard water treatment (defined as coagulation, flocculation, sedimentation, filtration and disinfection with chlorine or its equivalent). After receiving standard treatment, these waters will meet Colorado's drinking water regulations and any revisions, amendments, or supplements thereto"
        - There was recognition that this wording would require that "treatment" levels be clearly defined ("standard" versus other enhanced methods)
            - Is there a California Department of Public Health definition for "standard" treatment?

- Central Valley Water Board staff also presented a summary of California's salinity-related secondary Drinking Water Standards (Total Dissolved Solids/Specific Conductance, Chloride, and Sulfate) for consideration of Upper Level and/or Short-term/Intermittent Use values in the development of numeric water quality objectives.

- Stakeholder feedback included the following:
    - A preference for using the name "Operations" plan in place of "Management" plan (which is a specific model used for the Irrigated Lands Regulatory Program)

    - Concern on how we are defining "existing" MUN use for "Waters of the US" (tied to the water quality standards as of November 1975)

    - Need to be consistent with the term "contamination" since this is a defined term in the California Water Code.

    - Concern that de-designation of MUN will make a water body more attractive to dischargers. Is there a way to structure the regulatory language to discourage dischargers from changing their discharge points to less restrictive water bodies?

    - Can a narrative water quality objective be used to restrict "new" constituents from discharges (those not normally found in the background waters)?

- Can a classification method be linked to the type of discharge and types of contaminants anticipated to ensure that new or harmful constituents are not introduced to waters under a de-designation or limited MUN beneficial use?
- Need for adequate monitoring to ensure that there are no negative cumulative impacts downstream.
- Need to clarify monitoring locations – do we monitor point of entry or do we allow for mixing zones?
- Consideration should be given to monitoring frequencies – they should be on the same timeframe as the Drinking Water agencies.
- Concern that de-designating a water body would not really change the water quality requirements due to the need to protect downstream water bodies. For a farmer or discharger, will de-designation really help or will they still end up taking the same measures?
- Concern that, while these proposed changes may positively impact the POTWs, there will be a negative impact on growers due to the need for increased monitoring and the associated increased costs.
- Consideration for using dissolved metal concentrations in place of the total metal concentrations for the MCLs (filtration would remove suspended material).
- Concern that "high" and "intermittent" ranges for the secondary MCLs may not be adequate for certain water bodies, especially in the San Joaquin valley where the salinity is a lot higher.
- Is there a way to have water quality objectives for the different refined MUN categories "fill in" the electrical conductance gap between the intermittent range for the secondary MCL of 2200 µS/cm and Resolution 88-63's exception for waters higher than 5,000 µS/cm?

Action Items:

- *Central Valley Water Board staff will research issues and summarize feedback to refine proposed MUN beneficial use categories.*
- *Proposed designation process and identified issues will be discussed internally with Central Valley Water Board management and legal staff prior to the next stakeholder meeting.*
- *Comments regarding implementation, including monitoring issues, will be noted and reviewed again during the next stakeholder meetings when these topics are discussed.*
- *Stakeholders will provide any further feedback to Anne Littlejohn via email prior to the next stakeholder meeting.*

Working Definitions and Examples

- Central Valley Water Board staff presented Tulare Lake Basin stakeholder and alternative draft language for the working definitions "Ancillary Structure" and "Ag Recirculating System"
    - After stakeholder discussion, an updated draft version of "Ancillary Structure" was agreed to as follows:
        - *"On-farm or ancillary structures are privately constructed water conveyances necessary to maintain agricultural operations under a single owner and/or operation. Such structures include but are not limited to on farm irrigation systems such as furrows, beds and checks, and on-farm distribution systems (including tail-water ponds, ditches and sumps). On-farm or ancillary structures do not include facilities or improvements that may mix with natural or non-agricultural waterways (e.g. storm water drains) or are within the jurisdiction of the Federal Clean Water Act"*
    - Tulare Lake Basin stakeholders were in general agreement with the alternative proposal for the term "Ag Recirculating System" which included the addition of energy savings and chemical management for uses of recirculating systems.
        - *"Ag Recirculating Systems are designed to deliver irrigation water and retain agricultural return flows through recirculation in natural or constructed conveyance facilities through an area under single or coordinated management control which may or may not contain multiple individual farms. Examples include tail water recovery and irrigation systems managed to maximize water use, energy savings and/or chemical management while protecting downstream beneficial uses."*

- No changes were made to the stakeholder proposed language for "Closed Recirculating System"
    - *"Closed Recirculating Systems are designed to deliver and recirculate irrigation water and agricultural return water in a system of constructed conveyance facilities under a single or coordinated management system that may or may not contain multiple individual farms that retains all waters within the management area."*

- There was still concern over the proposed definition for "Ag Dominated".
    - Use of "50%" for flow and season - some water bodies for Ag operations may only be used every 10 years during flood years
    - Can we add wording to suggest that "but for Ag, there would not be flow and the beneficial use would not exist otherwise?"
    - Can we incorporate the wording used in Resolution 88-63 "systems designed or modified for the primary purpose…"
    - How will the "irrigation season" be defined?
    - Would current and historic land use (example, land used for agriculture over many generations) be applicable for use in the definition?
    - How do other states define agricultural waters?

- Central Valley Water Board staff presented a number of examples to further clarify the use of "extensively realigned and reconstructed" in Flow Chart 1 for modified water bodies. Comments from stakeholders were:
    - Portions of the water body are piped
    - Use "or" between each bullet to make it clear that the water body could have one or more of these characteristics, not necessarily all.

Action Items:

- *Central Valley Water Board staff will send out updated draft language for "Ancillary Structure", "Ag Recirculating System" and examples for Modified Water Bodies to ensure that comments were accurately captured.*
- *Central Valley Water Board will continue to refine language and work with internal management/legal staff on the term "Ag Dominated"*

Further Discussion of Draft Work Plan

- Central Valley Water Board staff asked for any further feedback on the Draft Work Plan after concluding the discussions on the beneficial use designations and definitions.
    - There were questions on the necessity and cost of expanding the CEQA review and Economic analysis to the other 3 areas in the Central Valley.
    - Will the process get bogged down? How will this impact the schedule?
    - Can it be phased to ensure that the Sacramento region is addressed first?
    - If the goal is to have the Sacramento template work for the other basins, can we just start with that assumption and let the additional work be done later if needed?
    - Some agreement that it might be better to address the valley-wide template issues up front instead of having to re-create the process later.
    - Might there be a need for a programmatic EIR?

Action Items:

- *Central Valley Water Board staff will continue to work with CV-SALTS on the Draft Work Plan and associated contracting needs/budgets.*

Project Schedule and Future Meetings

- May 2013
    - Complete Water Quality Objectives and proposed linkage to refined beneficial uses
    - Implementation Discussion
    - Initiate Monitoring/Surveillance Discussion

- June/July
    - Continue previous topics as needed

- Initiate discussions on other Policy Issues

Action Items:

- *Central Valley Water Board staff will send out a Meet-o-Matic to assist with scheduling the next meeting in May.*
- *Central Valley Water Board staff will provide meeting material to participants approximately 2 weeks prior to next scheduled meeting.*